

NICEATM Scientific Review Panel Request for Nominations (74 FR 62317)

02 December 2009

Name: Keith A. Houck
Affiliation: U.S. EPA
Address: [REDACTED]
[REDACTED]
Research Triangle Park, NC 27711
email: [REDACTED]
Telephone: [REDACTED]
Fax: [REDACTED]

I would like to nominate myself to the NICEATM independent scientific review panel to assess the validation status of two in vitro assays for endocrine disruptor screening (74 FR 62317). I believe I have a very appropriate background and expertise to serve on this panel. I have more than 15 years of relevant experience in industry and government positions. This experience includes developing, validating, operations, reviewing and interpreting in vitro assays. For several of these years, I directed a group of 10 scientists with a focus on developing assays for nuclear receptors, including the endocrine receptors, and screening large libraries of compounds to identify novel ligands. I have highlighted significant achievements in this area below. Please also see my attached C.V.

- Developed/validated over 100 in vitro assays for use in high-throughput screening or follow-up screening in support of drug discovery efforts at Eli Lilly & Co.
- Developed/validated several medium- to high-throughput screens for toxicity screening in support of lead characterization efforts (Ames II, PXR induction, CYP1A1 induction, cytotoxicity).
- Co-founded and chaired Assay Protocol Approval Committee that reviewed validation status for all high-throughput screens and secondary assays run at Eli Lilly & Co. for many years. Also was leader in defining guidelines used for the validation.
- Led Transcriptional Regulation Group at Eli Lilly & Co. that developed, validated and screened large chemical libraries for over 30 human nuclear receptor targets using both biochemical and cellular assays.
- Led screening effort in Tox21 collaboration (EPA/NTP/NCGC) against a panel of 12 nuclear receptors including key endocrine receptors.
- Participated in two recent workshops focused on endocrine disruptor screening.
- Served on several NIH Roadmap on Assay Development for High Throughput Molecular Screening Grant Review Panels
- Lead scientist in EPA's ToxCast program that makes extensive use of a wide variety of in vitro screening assays to support a predictive toxicology effort.